ABSTRACT OF THE DISCLOSURE

A method and system for improving utilization of the typical DBMS client-server configuration is provided. Specifically, the present invention can include a Database Switch (dBSwitch) situated between the applications and database servers in a network, capable of dynamically and transparently connecting applications to databases using standard database servers and standard protocols. The Database Switch appliance performs this database routing in real time, with high bandwidth and negligible latency. The Database Switch enables the formation of a Database Area Network (DAN) architecture, which promotes database virtualization by integrating the database servers, the shared storage, and the interconnecting network, making them appear to be one large, scalable database server. This DAN architecture yields high utilization, high availability, scalability on demand, simplified management and security, in a shared and heterogeneous application environment.